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Spotlight on Special Topics

ASSOCIATION BETWEEN MYOCARDITIS AND MORTALITY IN COVID-19 PATIENTS IN A LARGE REGISTRY

Moderated Poster Contributions
Sunday, May 16, 2021, 1:30 p.m.-1:40 p.m.

Session Title: COVID-19 and Cardiomyopathy: Risks and Recovery
Abstract Category: 61. Spotlight on Special Topics: Coronavirus Disease (COVID-19)
Presentation Number: 1089-11

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Background: Myocarditis is reported with COVID-19 infection. It's assumed that myocarditis is a negative prognostic factor without agreed upon treatment. We sought to assess the impact of myocarditis on the mortality of patients with COVID-19 infection using a large multinational registry.

Methods: We identified adult patients aged 18 to 90 years with COVID-19 infections in the TriNetx (Covid 19-Research network) database between January 20, 2020 and October 14, 2020. Patients were then divided into those who had a positive diagnosis for myocarditis versus those that did not. We compared all-cause mortality between propensity matched (PSM) pairs of patients in the 2 groups.

Results: A total of 171,737 patients were included. Of those, 256 (0.01) had a positive diagnosis of myocarditis post-Covid-19 diagnosis, and 171,481 (99.9%) did not have a positive diagnosis of myocarditis. Patients in the positive myocarditis group were older (50.5 vs 47.6, $P<0.001$) and more likely to be more male (58.5% vs 45.1%, $P<0.001$). In the PSM cohorts, 255/255 were matched and the all cause mortality was 17.3% vs 5.1% ($P<0.001$). Kaplan Meier survival analysis was also statistically significant ($P<0.001$).

Conclusion: In a large multi-national database of patients with COVID-19, we observed an association between the diagnosis of myocarditis and increased mortality.

